

# *Economic Policy and the True Believer: The Use of Ricardian Rent Theory in the Bombay Survey and Settlement System*

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The classical political economists, especially James Mill, had a major role in shaping British land tax policy in India. Only in Bombay Presidency did the men who administered the land tax share Mill's view of rent as the legitimate and appropriate source of revenue for government expenditure. These men created a land tax of considerable complexity in their desire to collect only a part of the rent from each field and thereby to foster economic development in the region. Even with their cadastral survey completed, however, they were compelled to use circumstantial evidence to determine whether any particular level of taxation was less than or greater than the rent. Agriculture in the Deccan and the Karnatak did improve after the implementation of the survey and settlement system, but available evidence suggests that rising prices for agricultural goods may have been as or more important than careful adherence to the finer points of Ricardian rent theory.

INDIA and the East India Company were major preoccupations for British economists from the seventeenth century through Indian independence in 1947. Adam Smith devoted a significant portion of *The Wealth of Nations* to discussion of the East India Company.<sup>1</sup> Keynes began his career as a junior clerk in the India Office; his first book was *Indian Currency and Finance*; and he served with distinction on the commission formed to consider Indian financial affairs.<sup>2</sup> William Barber's book, *British Economic Thought and India, 1600–1858*, and Eric Stokes's *The English Utilitarians and India* provide detailed discussions of British economists' writings on India; Stokes also gives a good picture of how this thought affected policy in India in spheres as diverse as land taxes and penal codes.<sup>3</sup> Here I will examine how the theory of rent spelled out by Ricardo in his *Principles of Political Economy and Taxation* (originally published in 1817) was used by the men who shaped

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<sup>1</sup> Adam Smith, *Wealth of Nations* (New York, 1965). See especially Book 4, chap. 7, part 3, and Book 5, chap. 1, part 3, second article.

<sup>2</sup> See J. M. Keynes, *The Collected Writings of John Maynard Keynes: Vol. XV. Activities 1906–1914, India and Cambridge*, ed. Donald Moggridge (London, 1971).

<sup>3</sup> William J. Barber, *British Economic Thought and India, 1600–1858* (London, 1975); Eric Stokes, *The English Utilitarians and India* (London, 1959).

the *administration* of tax policy in the Bombay Presidency.<sup>4</sup> How tax policy was implemented is an area that has not been studied and that seems both important and interesting. The real effects of implementation on people's lives can be quite as large as the effects of the general formulation of policy.

Although I will focus on administration, a few paragraphs are necessary to summarize the origins of the tax policy. From the mid-eighteenth century, when the East India Company began to acquire major blocks of Indian territory, one of the most pressing problems confronting the Company was how to finance its government activities. The preceding governments had relied most heavily on land taxes with minor amounts of customs, excise, and *octroi*. The Company did likewise, but it still had to figure out from whom land taxes should be collected and in what amounts—a truly formidable task for a miniscule number of Company employees in a totally alien environment. Early attempts to take over existing land taxes tended to have every imaginable problem—fraud, over- and undertaxation, difficulties about proprietary rights, falling yields. One effort to resolve the problems had been made in Bengal in 1793 with the promulgation of the Permanent Settlement. This plan created large estate holders (*zamindars*) and fixed government demand at current levels forever. Its author, Lord Cornwallis, hoped to foster a class of improving landlords and to force the government to look elsewhere for increases in revenue.<sup>5</sup> In Madras Presidency an attempt had been made to design a system under which the value of a share of one's field's total output would be collected from each cultivator. Sir Thomas Munro, the designer of the system, intended that the levels of taxation so determined should become permanent, but the Board of Control refused to agree. In 1818 the Company gained considerably more territory (including much of what became Bombay Presidency) and almost immediately began to seek ways to collect the land taxes in these regions.

In that same year, 1818, James Mill was appointed to the position of assistant examiner to the Board of Control. Shortly after his appointment he wrote,

as you know that the government of India is carried on by Correspondence, and that I am the only man whose business it is, or who has the time, to make himself master of the

<sup>4</sup> Although Bombay Presidency was a relatively small part of India it was absolutely very large. At the time of the first complete census in 1872 it had a population in excess of 14 million. By comparison the population of England and Wales in 1871 was 22.7 million.

<sup>5</sup> Mill, unkindly, testified that he thought one reason for the permanent settlement was "The detail of the business was so great, that it frightened Lord Cornwallis. . . ." Testimony of James Mill to the Select Committee on the Affairs of the East India Company, 1831, *Parliamentary Papers*, 1931, vol. 5, extracted in Donald Winch, ed., *James Mill: Selected Economic Writings* (Chicago, 1966), p. 425. Stokes is the best source for a general description of the progress of the debate about land revenue.

facts scattered in a most voluminous correspondence, on which a just decision must rest, you will conceive to what extent the real decision on matters belonging to my department rests with the man in my situation.<sup>6</sup>

Mill came to the East India Company in his mid-forties with a distinguished (if impecunious) career established. He was author of the multivolume *History of British India* and a major figure in the circle of men we now call classical economists. He was particularly close to Ricardo. Mill fully endorsed Ricardo's theory of rent and regarded Ricardo's treatment of taxation as "the most profound, by far, which has yet been given to the world."<sup>7</sup> But Mill was not a passive disciple of Ricardo. He felt free to modify and extend Ricardo's treatment of rent and taxation as seemed most useful in his new position of power.

In the years between 1819 and 1831 rent or net produce became increasingly accepted as the basis for land taxes in India. In part this was because of Mill's instructions in Revenue Despatches, but rent also had an advocate within the Government of India—Holt Mackenzie. Mackenzie had been a student of Malthus at the East India Company's college at Haileybury and continued to read the work of Malthus after he went to Calcutta. Like Mill, Mackenzie concluded that the traditional right of the state to some revenue from land could be interpreted to mean that the state had a claim to the economic rent. Also like Mill, Mackenzie stressed the dangers of any assessment by the state that exceeded the economic rent and consumed part of the return to capital and labor.<sup>8</sup> But in most of the parts of India neither Mill's instructions from London nor Mackenzie's from Calcutta had overwhelming effects upon the way the land taxes were determined. Civil servants at the provincial level, for a variety of reasons, failed to bring their systems of revenue assessment into congruence with the rent doctrine.<sup>9</sup> Only in Bombay Presidency did the rent doctrine fall upon totally receptive ears.

When the East India Company acquired major portions of Bombay Presidency in 1818 most of the area had been through a generation of political and natural catastrophes. The men charged with land revenue administration tried to use the existing revenue systems and tended to assume as normal and proper the rack-rents to which the country had been subject while its rulers tried to raise money to fight the Company and each other. By the mid-1820s the two southern parts of the Presidency (the Deccan and the Karnatak) were clearly distressed—

<sup>6</sup> Letter to Dumont, 13 Dec. 1818, quoted in Winch, *James Mill*, p. 18. Winch also notes that Ricardo may have been among those whose influence helped Mill secure the position, although he also cites evidence that it was Mill's *History of British India* that was the deciding factor (p. 17).

<sup>7</sup> Winch, *James Mill*, p. 197.

<sup>8</sup> Stokes, *English Utilitarians*, pp. 94–95; Mill's testimony to the Select Committee, Winch, *James Mill*, p. 424.

<sup>9</sup> For the bureaucratic battles, see Stokes, *English Utilitarians*, pp. 110–39.

cultivation was declining, arrears of revenue were rising, and protests from the peasants were increasing.<sup>10</sup> As the Government of Bombay began to deal with this situation, it turned first to Robert Keith Pringle, a young man who had won the medal in political economy at Haileybury. Having “proved” that the traditional Indian practice of taking a share of the gross produce of land was detrimental to progress and improvement, the young officer decided to use the net produce (that is, gross produce minus all the expenses of cultivation including wages and a normal return on capital) or the true rent as the basis for taxation. To avoid any chance of overassessment Pringle decided to limit the government demand to 55 percent of the net produce, and, after considerable effort at soil classification and determination of costs of cultivation, the new system went into effect. Given the difficulties that the Government of India and its constituent parts have to this day in determining the costs of cultivation, it is probably not surprising that Pringle did not succeed. In spite of his doctrinal purity, his assessment was a disaster of overassessment, which had the peasants fleeing into neighboring provinces and native states.<sup>11</sup>

In the attempt to rescue the districts that had felt the full benefit of Pringle’s settlement, the man emerged who would guide the revenue survey in its formative years. George Wingate had been trained as an engineer at Addiscombe, joined the Bombay Engineers in 1829 (at the age of 17), and was seconded to the revenue survey in 1842 or earlier (where he spent the rest of his career). In collaboration with H. E. Goldsmid and a variety of other officers, Wingate designed a new system for assessment of taxes on land in Bombay Presidency.<sup>12</sup> Ricardian thinking on rent and taxation, as extended and modified by James Mill (and later by John Stuart Mill), was the standard and the defense of the system. James Mill had argued in 1831 that “the rent of land [was] never appropriated to individuals, and always considered to

<sup>10</sup> Michelle Burge McAlpin, *Subject to Famine: Food Crises and Economic Change in Western India, 1860–1920* (Princeton, 1983), pp. 103–8.

<sup>11</sup> Stokes, *English Utilitarians*, pp. 99–103; McAlpin, *Subject to Famine*, pp. 108–9.

<sup>12</sup> Alone or with others, Wingate wrote virtually every substantive statement about the philosophy and working of the Bombay Survey and Settlement System from its inception until his retirement in 1854. He continued to be an authority on the system and to be quoted and to have his advice sought for at least another decade. In 1865 he was made a baronet and a Knight Commander of the Star of India. In his nomination for these honors, Bartle Frere, Governor of Bombay Presidency, wrote: “Major George Wingate, retired from the Bombay Engineers has had a greater share than any man now living in organizing and carrying out the system of Revenue Survey and assessment which has been adopted throughout the British possessions in Western India, and from which the Government, and at least 15 millions of the agricultural population have in many cases for more than 25 years past, profited so largely, and which has done so much to attach to the British Government all classes of the population who were affected by it. During my 30 years experience in India I have known no man, with the exception of Mr. Mount Stuart Elphinstone the first governor of Bombay to whom I consider the government and people of this part of India under greater obligation than to Major George Wingate” (India Office Records, Order of the Star of India, *Despatches and Recommendations from the Institution of the Order till 1870*, p. 839).

be the property of government” in India.<sup>13</sup> In Bombay all land was declared the property of the state, and the amount collected from land was often called the government rent. Mill had argued that the good of the masses of cultivators might best be secured if “the assessment should be made and should be collected from them by the officers of government, without the intervention of a middle-man . . . the interest of the ryot is much more likely to be protected if he transacts with the officer of government under all responsibility to which he is liable. . . .”<sup>14</sup> Only in Bombay Presidency did the revenue authorities actually deal with each person who laid claim to land.

But it was in the generation of the statistics needed to determine the relative rents of different pieces of land that the Bombay Survey and Settlement System was most faithful to the rent doctrine. At the base of the system was a complete cadastral survey. In each village a complete measurement of the fields and wastelands was made. The owners of fields were required to erect boundary markers at the corners of their fields and wherever necessary to make clear the limits of oddly shaped fields.<sup>15</sup> When the measurement of a village had been completed, its fields were classed to determine the quality of soil. The survey officers developed a soil classification of nine grades. The best soil was “black” soil (1 3/4 cubits) or more deep. The classes ranged down through black soil of lesser depth to “red” soil, and finally to grey or light brown soil. Deep red soil was put in the same class as moderately deep black soil; shallow black and red soils were put in the same classes as moderately deep grey or light brown soil. Class 3, for instance, contained both black soil of an average depth of 1 1/2 cubits and red soil of a depth of 1 3/4 cubits. Class 7 contained black soil 1/4 cubit deep, red soil 1/2 cubit deep, and grey soil 3/4 cubit deep. But such a classification meant little unless it could be used in the fields to determine their fertility. To make this determination the “classers” of the revenue establishment divided each field into a number of equal parts and tested the soil in each. In addition to noting the class of soil they noted a variety of faults that would reduce the value of the field. For the section of the field where a fault occurred (say, a sloping surface), the class of the section was lowered one class from what it would have been on the basis of soil type and depth alone. The resulting classes were averaged to arrive at a class for the entire field.<sup>16</sup> At this point in the survey and settlement process, the relative fertility of fields had been established.

<sup>13</sup> Mill's testimony to the Select Committee, Winch, *James Mill*, p. 424.

<sup>14</sup> Ibid.

<sup>15</sup> There is a vast amount of debate about whether or not people who paid land taxes to the government *owned* the land. I use the term “own” because I find it convenient and at least as accurate as “hold” and “occupy.”

<sup>16</sup> *Official Correspondence on the System of Revenue Survey and Assessment* (Bombay, 1850), pp. 10–12 [henceforth, *Joint Report*].

More work was needed to determine what the relative rents were. Villages with similar climate (chiefly annual rainfall) and similar access to markets were formed into groups that would have the same rates of government demand. Within villages, the classification of soil fertility was combined with a “distance-from-village scale” designed to take account of the increased cost of manuring land, going to and from land for work, and guarding and carrying home produce as distance from the village site increased.<sup>17</sup> In the Karnatak and the Deccan, villages were also classed by the population of the village and the likely supply of manure.<sup>18</sup> To sum up, in determining what level of “rent” the government should claim from each field, the Bombay system considered the inherent fertility of the soil, the climate and markets enjoyed by the village, the access to the field from the village, the population of the village, and the likely availability of manure.

Faithful disciples of Mill, Goldsmid and Wingate stressed that they were following the rent doctrine:

we are of the opinion that the more permanent distinctions of climate, markets, and husbandry, should receive attention. We should not think of imposing different rates of assessment on a tract of country similarly situated in respect to these three points in consequence of the actual condition of the cultivators varying in different parts of it. Were we to do so, we should depart from the principle laid down by the Hon'ble Court of Directors, of assessing land according to its capabilities and adopt the objectionable one of doing so with reference to the means of the person holding it. The effect of such a system, by creating different rates of profit on capital employed in agriculture, would interfere with its natural and most advantageous distribution by diverting it from lands, actually in cultivation, to the lowly assessed waste of those villages of which the cultivators happen to be poor.<sup>19</sup>

Their attackers, of course, disagreed. You will have noticed that although this system places great emphasis on the ascertainment of the relative capabilities and costs of individual fields, absolute productivity and cost are utterly absent. How then could they possibly determine the rent or net produce? They reasoned this way: When the government demand was less than the economic rent, cultivation would be constant or expanding and land would have a positive market price (reflecting the capitalized rent remaining with the cultivator). When the government demand equaled or exceeded the economic rent, cultivation would be declining and land would not have a positive market price (reflecting the absence of any rent being left to the cultivator). All that was necessary, then, to determine a prudent level of demand for a village was to examine its revenue history. If cultivation had been expanding, the current level could be assumed to be less than the economic rent. If

<sup>17</sup> Bombay Presidency, *The Survey and Settlement Manual*, vol. 3 (Bombay, 1902), pp. 96–99.

<sup>18</sup> *Ibid.*, pp. 27–30.

<sup>19</sup> *Joint Report*, p. 15.

cultivation had not been expanding, then the government demand must be reduced.<sup>20</sup> As a test of whether or not the established level of government demand did in fact leave some portion of the rent with the cultivator, one had only to examine the records to see if cultivation was increasing and if land had become (or remained) salable.<sup>21</sup>

This system freed Goldsmid and Wingate from trying to do the impossible—determining the true rents of different descriptions of land by calculating the net produce.

From the difficulty of ascertaining the true rent of different descriptions of land, we have not assumed any theoretical proportion of this for the standard of our assessment; but we fully coincide in the justice of the principle of limiting the Government demand to a portion of the *true rent* . . . and that this principle, if capable of being carried into practice, would prove an invaluable blessing to the agricultural classes of India, and introduce a new era in their history.<sup>22</sup>

#### CODA: RESULTS

Considering the immense effort put into this system (30 years to survey and settle all of Bombay Presidency, by which time the original 30-year leases were expiring and the process began again), and the commitment and belief of its architects and superintendent, we must ask how successful it was. In those parts of the presidency where the question has been carefully examined, accumulation of capital, increases in cultivation, and increases in land prices did occur. In some part, this was surely because of the revenue survey. It did give clear titles to fields and near total security of tenure. It did rationalize and lower rates of taxes. But it also occurred during a period when agricultural prices had begun to rise. The rise in agricultural prices substantially reduced the real value of government collections and might have, in and of itself, been sufficient to increase agricultural prosperity in the area.<sup>23</sup> In the absence of detailed studies that would permit comparison of Bombay Presidency with other parts of British India it is not possible to determine the relative importance of the Bombay establishment's faithful adherence to Ricardian rent theory and of rising prices for agricultural products. But it is in any case a startling instance of Keynes's remark about the force of ideas for good or ill.

<sup>20</sup> In 1846 Wingate wrote: "For the first nine years of the diagram, we observe a high average assessment, and a slowly diminishing rental and cultivation, as far as the latter can be ascertained, indicating unmistakably that the assessment was in excess. For the next five years we have a much reduced assessment, and in this period, it will be observed, cultivation steadily advanced. . . ." "Report by Captain G. Wingate, Superintendent of the Revenue Survey in the Southern Mahratta Country, on the Survey and Assessment of the *Bunkapoor* Talook in the Zillah of *Dharwar*," *Parliamentary Papers* (1852–1853), vol. 75, p. 389.

<sup>21</sup> *Survey and Settlement Manual*, vol. 1, app. 1, p. viii.

<sup>22</sup> *Ibid.*, p. vi.

<sup>23</sup> See McAlpin, *Subject to Famine*, pp. 113–31, for an extended discussion of the changes in agriculture in the Deccan and the Karnatak under the Bombay Survey and Settlement System.